



KNL-162-A

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Akedo et al.
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Examiner: G. A. Blackwell
Confirmation Number: 9552
Title: Composite Structure And
Method And Apparatus For Forming The Same

**LETTER OF RECORD
TO CORRECT THE "TITLE OF INVENTION" SHOWN
ON THE NOTICE OF ALLOWANCE**

Mail Stop Issue Fee
Commissioner For Patents
Post Office Box 1450
Alexandria, Virginia 22313-1450

Sir:

Applicant wishes hereby to correct the following discrepancy noted on the Notice Of Allowance dated 15 August 2006 in the referenced case:

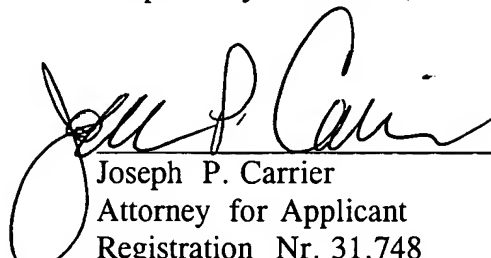
The title of the invention, as shown on page 1 of the specification filed on 19 February 2002 (copy printed from PAIR enclosed as Exhibit A), is **COMPOSITE STRUCTURE AND METHOD AND APPARATUS FOR FORMING THE SAME.**

Accordingly, please correct the title shown on the Notice Of Allowance, "COMPOSITE STRUCTURED MATERIAL AND METHOD FOR PREPARATION THEREOF AND APPARATUS FOR PREPARATION THEREOF", to read --COMPOSITE STRUCTURE AND METHOD AND APPARATUS FOR FORMING THE SAME--.

Favorable consideration is respectfully requested.

Respectfully submitted,


Customer Number 21828
Carrier, Blackman & Associates, P.C.
24101 Novi Road, Suite 100
Novi, Michigan 48375
06 November 2006



Joseph P. Carrier
Attorney for Applicant
Registration Nr. 31,748
(248) 344-4422

I hereby certify that this correspondence is being deposited with the U.S. Postal Service as first class mail in an envelope addressed to Mail Stop Issue Fee, Commissioner For Patents, Post Office Box 1450, Alexandria, Virginia 22313-1450 on 06 November 2006.

Dated: 06 November 2006
JPC/eb
enclosure



Erica Briggs

SPECIFICATION

**COMPOSITE STRUCTURE AND METHOD AND APPARATUS FOR FORMING
 THE SAME**



5 BACKGROUND OF THE INVENTION

1. Field of the Invention

[001] The present invention relates to a composite structure whereby a structure made of a brittle material such as a ceramic or a metalloid is formed on a substrate surface, and a method and apparatus for forming such a composite structure.

10 2. Description of the Prior Art

[002] Generally, when a ceramics sintered body is formed, a liquid phase sintering is carried out in which a sintering assistant is added to make the inter-jointing of ceramic particles easier so as to form a liquid phase near the boundary face at which the particles join.

[003] 15 Hot pressing is known as a method for forming a high-density sintered body without using the sintering assistant. A vapor deposition method such as PVD and CVD or a thermal spraying method is also known as a method of forming a coat such as a metal or a ceramic on a substrate surface.

[004] On the other hand, a gas deposition method (published in a metal magazine
 20 "KINZOKU" issued in January 1989 by Mr. KASHU, Seiichiro) and an electrostatic fine particle coating method (published in an advance printing used in an academic lecture meeting by Mr. Ikawa et al. in the Precision Machine Society of Japan held in the autumn of 1977) are also known as new coat-forming methods. In the former, it is a basic principle that ultra-fine particles such as metal or ceramic are made into an aerosol
 25 by gas agitation and accelerated through a minute nozzle. When the ultra-fine particles collide with a substrate, a part of their kinetic energy is converted to thermal energy to cause sintering between the fine particles or between the fine particles and the substrate. In the latter, it is a basic principle that fine particles are charged and accelerated using a gradient of an electric field, and then sintered in the same manner as in the gas